Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): An implantable microfabricated sensing device capable of being entirely implanted within a human body ~~sensor device~~ for measuring a physiologic parameter of said human body, said sensing device comprising a biocompatible monolithic structure ~~interest within a patient, said sensor~~ comprising: a substrate; a sensor integrally microfabricated ~~formed~~ with said substrate and being responsive to the physiologic parameter; at least one conductive path ~~paths~~ integrally formed with said substrate and said sensor; and active circuitry microfabricated in ~~close~~ proximity to said sensor and electrically connected to said sensor by said conductive path.

Claim 2 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is a capacitive sensor having a fixed electrode and a moveable electrode.

Claim 3 (currently amended): The sensing ~~sensor~~ device of claim 2 wherein

said fixed electrode is ~~formed as~~ a conductive layer on said substrate.

Claim 4 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is at least partially formed of a cap layer on said substrate.

Claim 5 (currently amended): The sensing ~~sensor~~ device of claim 4 wherein said cap layer includes portions defining a diaphragm of said sensor.

Claim 6 (currently amended): The sensing ~~sensor~~ device of claim 4 wherein said active circuitry is integrally fabricated in said substrate. ~~with said sensor.~~

Claim 7 (currently amended): The sensing ~~sensor~~ device of claim 4 wherein said cap layer is formed of monocrystalline silicon.

Claim 8 (currently amended): The sensing ~~sensor~~ device of claim 4 wherein said cap layer is boron doped silicon.

Claim 9 (currently amended): The sensing ~~sensor~~ device of claim 2 wherein said fixed and moveable electrodes define an interior volume therebetween and a surface cavity in ~~portion of~~ said substrate defines ~~define~~ a displacement cavity in

communication with said interior volume.

Claim 10 (currently amended): The sensing ~~sensor~~ device of claim 2 wherein said fixed electrode includes a main electrode and at least one reference electrode.

Claim 11 (currently amended) The sensing ~~sensor~~ device of claim 1 wherein said sensing device is entirely implanted within said human body and is operating to measure the physiologic parameter within said human body. ~~monolithic.~~

Claim 12 (currently amended): The sensing ~~sensor~~ device of claim 1 further comprising a cap layer formed over said substrate.

Claim 13 (currently amended): The sensing ~~sensor~~ device of claim 12 wherein said cap layer includes a portion defining a moveable electrode of said sensor.

Claim 14 (currently amended): The sensing ~~sensor~~ device of claim 12 wherein said cap layer is conductive.

Claim 15 (currently amended): The sensing ~~sensor~~ device of claim 12

wherein said cap layer is doped silicon.

Claim 16 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is a pressure sensor.

Claim 17 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is a temperature sensor.

Claim 18 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is a chemical sensor.

Claim 19 (currently amended): The sensing ~~sensor~~ device of claim 1 further comprising a cap layer bonded to said substrate, said active circuitry being integrally formed in said cap layer. ~~wherein said active circuitry is integrally formed within a cap layer over said substrate.~~

Claim 20 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said active circuitry is integrally formed in said substrate. ~~with said substrate.~~

Claim 21 (currently amended): The sensing ~~sensor~~ device of claim 1

wherein said active circuitry is mounted to said substrate.

Claim 22 (currently amended): The sensing ~~sensor~~ device of claim 21 wherein said active circuitry is received within a recess defined in said substrate.

Claim 23 (currently amended): The sensing ~~sensor~~ device of claim 1 further comprising at least two sensors.

Claim 24 (currently amended): The sensing ~~sensor~~ device of claim 23 wherein said two sensors sense the same physiologic parameter.

Claim 25 (currently amended): The sensing ~~sensor~~ device of claim 23 wherein said two sensors sense different physiologic parameters.

Claim 26 (currently amended): The sensing ~~sensor~~ device of claim 1 wherein said sensor is a capacitive sensor having a fixed electrode and a moveable electrode, said fixed and moveable electrodes being electrically coupled by first and second conductive paths to said active circuitry, said first and second paths being electrically isolated from one another.

Claim 27 (currently amended): The sensing ~~sensor~~ device of claim 26 wherein said paths are isolated by a dielectric layer therebetween.

Claim 28 (currently amended): The sensing ~~sensor~~ device of claim 26 wherein said paths are isolated by a p-n junction structure.

Claim 29 (currently amended): The sensing ~~sensor~~ device of claim 26 wherein said capacitive sensor operates in a proximity mode whereby the fixed electrode and the moveable electrode do not contact each other when responding to the physiologic parameter.

Claim 30 (currently amended): The sensing ~~sensor~~ device of claim 26 wherein said capacitive sensor operates in a touch mode whereby the fixed electrode and the moveable electrode progressively contact each other when responding to the physiologic parameter.

Claim 31 (currently amended): The sensing ~~sensor~~ device of claim 1 further comprising a bioinert coating over a majority of exterior surfaces of said sensor.

Claim 32 (currently amended): The sensing ~~sensor~~ device of claim 1 further

comprising a housing defining a form ~~form~~ factor providing an external shape to said sensing device that differs from the monolithic structure.

Claim 33 (currently amended): The sensing ~~sensor~~ device of claim 32 wherein said housing is of a non-rigid material.

Claim 34 (currently amended): The sensing ~~sensor~~ device of claim 32 wherein said housing is a plastic material. ~~of plastic.~~

Claim 35 (currently amended): The sensing ~~sensor~~ device of claim 32 wherein said housing comprises a recess providing intimate access to the sensor. ~~is soft.~~